



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 WWW.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/088,826	826 08/13/2002		Mark J. Pykett	C01005/70008	5264	
23628	7590	06/04/2004		EXAMINER		
	EENFIELD & RESERVE PLA	& SACKS, PC	BELYAVSKYI, MICHAIL A			
600 ATLANTIC AVENUE				ART UNIT	PAPER NUMBER	
BOSTON, N	OSTON, MA 02210-2211			1644	1644	
				DATE MAILED: 06/04/2004	i d	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/088,826	PYKETT ET AL,
Office Action Summary	Examiner	Art Unit
	Michail A Belyavskyi	1644
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be you within the statutory minimum of thirty (30) did will apply and will expire SIX (6) MONTHS from CAUSE the application to become ARANDON	timely filed ays will be considered timely. In the mailing date of this communication.
1) Responsive to communication(s) filed on 22 M	larch 2003.	
	action is non-final.	
Since this application is in condition for allowar closed in accordance with the practice under E		
Disposition of Claims		
4) Claim(s) 1-16 and 18-21 is/are pending in the a 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 1-16 and 18-21 are subject to restriction Application Papers 9) The specification is objected to by the Examiner	on and/or election requirement.	
10)☐ The drawing(s) filed on is/are: a)☐ acce		
Applicant may not request that any objection to the c		
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Example 11.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Applicat ty documents have been receive (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	(PTO-413) ate vatent Application (PTO-152)

Page 2

Application/Control Number: 10/088,826

Art Unit: 1644

DETAILED ACTION

1. Applicant's amendment filed 03/22/03 is acknowledged.

Claims 1-16 and 18-21 are pending.

Restriction Requirement

- 2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
- I. Claims 1-4, 9-16, 19 and 20, drawn to a method for in vitro culture of hematopoietic progenitor cells to produce <u>mesenchymal</u> differentiated cells, classified in Class 435, subclasses 377 and 384.
- II. Claims 1-3, 5, 9-16 and 18-20, drawn to a method for in vitro culture of hematopoietic progenitor cells to produce <u>neuronal</u> differentiated cells, classified in Class 435, subclasses 377 and 384.
- III. Claims 1-3, 6, 9-16 and 19-20, drawn to a method for in vitro culture of hematopoietic progenitor cells to produce <u>epithelial</u> differentiated cells, classified in Class 435, subclasses 377 and 384.
- IV. Claims 1-3, 7, 9-16 and 19-20, drawn to a method for in vitro culture of hematopoietic progenitor cells to produce endothelial differentiated cells, classified in Class 435, subclasses 377 and 384.
- V. Claims 1-3, 8-16 and 19-20, drawn to a method for in vitro culture of hematopoietic progenitor cells to produce <u>parenchymal</u> differentiated cells, classified in Class 435, subclasses 377 and 384.
- VI. Claims 1, 9-16 and 19-21, drawn to a method for in vitro culture of hematopoietic progenitor cells to produce differentiated cells, wherein hematopoietic progenitor cells are genetically altered, classified in Class 435, subclasses 455

Application/Control Number: 10/088,826 Page 3

Art Unit: 1644

3. Groups I- VI are different methods. These inventions are different with respect to ingredients, method steps, and endpoints which require non-coextensive searches; therefore, each method is patentably distinct.

4. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct method steps. Moreover, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention. Therefore restriction for examination purposes as indicated is proper.

Species Election

- 5. Applicant is further required under 35 USC 121 (1) to elect a single disclosed species to which the claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.
- 6. If any one of the Groups I -VI is elected, applicant is required to elect a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific metal is selected from the group recited in claim 14.

These species are distinct because a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific metal is selected from the group recited in claim 14 differ with respect to the specific growth factor thus each specific method employing a specific growth factor represents patentably distinct subject matter.

In addition,

7. If Group I is elected, applicant is required to elect a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 4.

These species are distinct because a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 4 differ with respect to the specific growth factor thus each specific method employing a specific growth factor represents patentably distinct subject matter.

Application/Control Number: 10/088,826

Art Unit: 1644

8. If Group II is elected, applicant is required to elect a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 5.

These species are distinct because a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 5 differ with respect to the specific growth factor thus each specific method employing a specific growth factor represents patentably distinct subject matter.

9. If Group III is elected, applicant is required to elect a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 6.

These species are distinct because a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 6 differ with respect to the specific growth factor thus each specific method employing a specific growth factor represents patentably distinct subject matter.

10. If Group V is elected, applicant is required to elect a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 8.

These species are distinct because a specific method for in vitro culture of hematopoietic progenitor cells, wherein a specific growth factor is selected from the group recited in claim 8 differ with respect to the specific growth factor thus each specific method employing a specific growth factor represents patentably distinct subject matter.

11. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Page 5

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

- 12 Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).
- 13. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

A telephone call was made to Helen Lockhart on 05/14/04 to request an oral election to the above restriction requirement, but did not result in an election being made.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michail Belyavskyi whose telephone number is 571/272-0840 The examiner can normally be reached Monday through Friday from 9:00 AM to 5:30 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571/272-0841.

The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michail Belyavskyi, Ph.D. Patent Examiner Technology Center 1600 May 25, 2004

SUPERVISORY PATENT EXAMINER
SECHNOLOGY CENTER 1600